

(19) World Intellectual Property
Organization
International Bureau



31 MAY 2005



(43) International Publication Date
17 June 2004 (17.06.2004)

PCT

(10) International Publication Number
WO 2004/051171 A2

- (51) International Patent Classification⁷: **F28F**
- (21) International Application Number:
PCT/KR2002/002264
- (22) International Filing Date: 2 December 2002 (02.12.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicant (for all designated States except US): **LG ELECTRONICS INC.** [KR/KR]; 20, Yoido-Dong, Yongsungpo-Ku, 150-010 Seoul (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SHIN, Soo-Yeon** [KR/KR]; Booyoung Apt. 1202-902 Wolsan maeul, Boogok-Li, Jangyu-Myeon, 621-833 Gimhae, Kyung-sangnam-do (KR). **LEE, Seong-Hwan** [KR/KR]; Woosong Apt. 102-1303, Namyang-Dong, 641-091 Changwon, Kyung-sangnam-Do (KR). **CHO, Min-Chul** [KR/KR]; 812-8, 2/3, Mandeok 1-Dong, Buk-Ku, 616-830 Busan (KR).
- (74) Agent: **PARK, Jang-Won**; Jewoo Bldg. 5th Floor 200 Nonhyun-Dong, Kangnam-Ku, 135-010 Seoul (KR).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

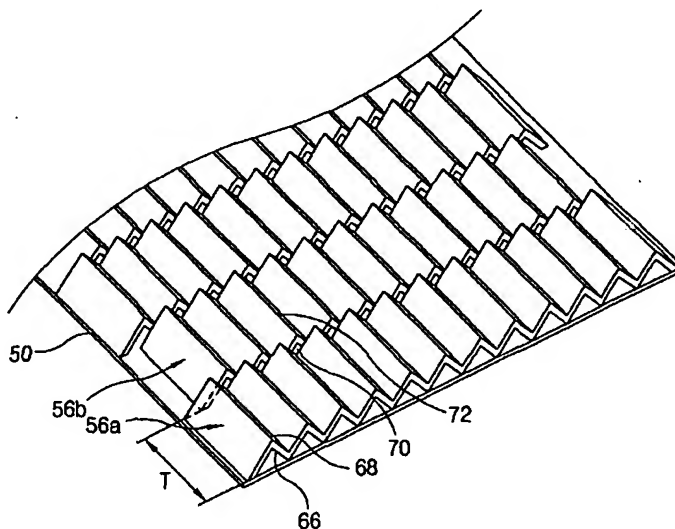
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **HEAT EXCHANGER OF VENTILATING SYSTEM**



(57) Abstract: A heat exchanger of a ventilating system includes a plurality of heat exchange plates which are laminated at a predetermined interval, a first heat exchange portion which is positioned among the heat exchange plates and through which outdoor air passes and a second heat exchange portion which is positioned among the heat exchange plates in turn with the first heat exchange portion and through which indoor air passes. The first and second heat exchange portions are composed of a plurality of heat exchange members having a predetermined length, and an inner surface of one heat exchange member and an outer surface of the other heat exchange member are aligned to face each other. Accordingly, the heat exchanger can improve heat transfer performance by restraining development of a boundary layer by improving air flowing structure of the heat exchanger.



WO 2004/051171 A2